THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A method of altering a specific immune response to an antigen in an individual sensitized to the antigen comprising:

i). administering to the individual an effective amount of the antigen in immunotherapeutic form, wherein said immune response is down regulated; and

ii). subsequently administering to the individual an effective amount of an immunomodifying agent comprising the antigen in immunogenic form.

2. A method according to claim 1, wherein the immunomodifying agent further comprises either a TH1 or TH2 adjuvant, wherein the adjuvant normally induces the type of TH-response which is the target of the immunotherapy.

3. A method according to claim 1 or claim 2, wherein the immunotherapy is targeted at the specific immune response.

4. A method according to any one of claims 1 to 3, wherein the effective amount in step i) is one or more doses of said antigen in immunotherapeutic form.

5. A method according to any one of claims 1 to 4, wherein said antigen in immunotherapeutic form further comprises agents designed to modulate the specific immune responses.

6. A method according to any one of claims 1 to 5, wherein the alteration to the specific immune response is attenuation of the TH-response component, which is associated with expression of the disease being treated.

7. A method according to any one of claims 1 to 5, wherein the alteration to the specific immune response is conversion of the TH1 component of the response to a TH2 component or conversion of the TH2 component to a TH1 component.

8. A method according to any one of claims 1 to 5, wherein the alteration to the specific immune response is reversing the ratio between the TH1 and TH2 components of the response.

9. A method according to claim 8, wherein the immune response in an untreated individual comprised high level production of TH1 cytokines and low level production of TH2 cytokines is reversed following treatment.

10. A method according to claim 8, wherein the immune response in an untreated individual comprised high level production of TH2 cytokines and low level production of TH1 cytokines is reversed following treatment.

11. A method of treating a TH1-associated disease comprising:

i). administering to an individual in need thereof an effective amount of an antigen in immunotherapeutic form; and

ii). subsequently administering to the individual an effective amount of an immunomodifying agent comprising said antigen in immunogenic form, wherein the antigen specific TH1 response in the individual is reduced relative to the specific TH1 response before administration of said immunomodifying agent.

12. A method according to claim 11, wherein the immunomodifying agent further comprises a TH1 adjuvant.

13. A method of treating a TH2-associated disease comprising:

i). administering to an individual in need thereof an effective amount of an antigen in immunotherapeutic form; and

ii). subsequently administering to the individual an effective amount of an immunomodifying agent comprising said antigen in immunogenic form, wherein the antigen specific TH2 response in the individual is reduced relative to the specific TH2 response before administration of said immunomodifying agent.

14. A method according to claim 13, wherein the immunomodifying agent further comprises a TH2 adjuvant.

15. A method of treating a disease associated with a mixed TH1 and TH2 immune response comprising:

i). administering to an individual in need thereof an effective amount of an antigen in immunotherapeutic form; and

ii). subsequently administering to the individual an effective amount of an immunomodifying agent comprising said antigen in immunogenic form which boosts both TH1 and TH2 immunity, wherein ensuing specific TH1 and TH2 responses in the individual are reduced relative to the specific TH1 and TH2 responses before administration of said immunomodifying agent.

16. A method according to claim 15, wherein the immunotherapeutic form in step i) is sublingual administration of antigen.

17. A method according to claim 15 or claim 16, wherein the immunomodifying agent in step ii) is administered parenterally.

19. A method according to any one of claims 15 to 18, wherein the immunomodifying agent further comprises either an adjuvant which boosts both TH1 and TH2 immunity or a mixture of TH1 and TH2 adjuvants, wherein ensuing specific TH1 and TH2 responses in the individual are reduced relative to the specific TH1 and TH2 responses before administration of said immunomodifying agent.

20. A method according to claim 1, wherein the immunotherapy is administration to an individual in need thereof an effective amount of one or more antigen(s) in immunotherapeutic form, wherein the antigens are associated with expression of pathogenic TH2 immunity.

21. A method according to claim 21, wherein the individual suffers from a TH1-associated disease and the antigen in immunotherapeutic form is predominately a TH1-specific antigen.

22. A method of treating a disease comprising:

i). administering to an individual in need thereof an effective amount of an antigen in immunotherapeutic form, wherein the immune response to said disease is down regulated; and

ii). subsequently administering to the individual an effective amount of an immunomodifying agent comprising said antigen in immunomodifying form.

23. A method according to claim 22, wherein the immunomodifying agent further comprises either a TH1 or TH2 adjuvant, wherein the adjuvant normally induces the type of TH-response which is the target of the immunotherapeutic form of the antigen.

24. A method according to claim 22, wherein the disease is a TH1-associated disease selected from the group consisting of rheumatoid arthritis, multiple

sclerosis, thyroiditis, Crohn's disease, systemic lupus erythematosus, experimental autoimmune uveoretinitis, experimental autoimmune encephalitis, insulin dependent diabetes mellitus, contact dermatitis and chronic inflammatory disorders.

25. A method according to claim 22, wherein the disease is a TH2-associated disease selected from the group consisting of allergic atopic disorders, allergic asthma, atopic dermatitis, hyper-IgE syndrome, Omenn's syndrome, and allergic rhinitis.

26. A method according to claim 2, wherein the TH2 adjuvant is selected from the group consisting of alum, pertussis toxin, lacto fucopentaose III, and phosphopolymer or combinations thereof.

27. A method according to claim 2, wherein the TH1 adjuvant is selected from the group consisting of complete Freund's adjuvant, monophosphoryl lipid A, 3-de-O-acylated monophosphoryl lipid A (3D-MPL), aluminum salt, CpG-containing oligonucleotides, immunostimulatory DNA sequences, saponin, Montanide ISA 720, SAF, ISCOMS, MF-59, SBAS-3, SBAS-4, Detox, RC-529, aminoalkyl glucosaminide 4-phosphate, and LbeIF4A.

28. A method according to any one of claims 1 to 27, wherein the individual is a mammalian animal.

29. A method according to claim 28, wherein the mammalian animal is a dog, a cat, a livestock animal, a primate or a horse.

30. A method according to claim 28, wherein the mammalian animal is a human.

31. A kit when used for altering TH1 or TH2 response

phenotype in an individual in need thereof comprising:

i). one or more TH1 antigen(s); or

ii). one or more TH1 or TH2 adjuvant(s); or

iii).combinations thereof; and

iv). instructions for use.

32. A method of immunotherapy comprising:

i). administration to an individual in need thereof a plurality of antigen shots;

ii). administration to said individual less than five individual shots of said antigen combined with one or more TH1 and/or TH2 adjuvant(s).

33. A method according to claim 32, wherein the individual shots of said antigen combined with TH1 and/or TH2 adjuvant is less than three.

34. A method according to claim 32, wherein the individual shots of said antigen combined with TH1 and/or TH2 adjuvant is one.

35. Use of an immunomodifying agent for the manufacture of a medicament for the treatment a TH1-associated disease or TH2-associated disease, wherein said immunomodifying agent comprises an antigen in immunomodifying form.

36. Use according to claim 35, wherein the immunomodifying agent further comprises at least one adjuvant that is associated with augmenting a T helper-response of the type associated with said disease.

37. Use of immunomodifying agent for the manufacture of a medicament for the treatment of a TH-1 or TH-2 associated disease inflicting an individual susceptible hereto, where said individual previously is treated with an immunotherapeutic form and dose of an antigen having

reduced the T-helper immune response associated with said disease in said individual, and wherein the immunomodifying agent comprises at least one adjuvant that is associated with augmenting a T helper-response of the type associated with said disease and a immunogenic form of said antigen.

38. Use according to claim 37, wherein the immunotherapeutic form is targeted at the specific immune response.

39. Use according to claim 37, wherein the alteration to the specific immune response is attenuation of the TH-response component, which is associated with expression of the disease being treated.

40. Use according to claim 37, wherein the alteration to the specific immune response is conversion of the TH1 component of the response to a TH2 component or conversion of the TH2 component to a TH1 component.

41. Use according to claim 37, wherein the alteration to the specific immune response is reversing the ratio between the TH1 and TH2 components of the response.

42. Use according to claim 37, wherein the immune response in an untreated individual comprised high level production of TH1 cytokines and low level production of TH2 cytokines is reversed following treatment.

43. Use according to claim 37, wherein the immune response in an untreated individual comprised high level production of TH2 cytokines and low level production of TH1 cytokines is reversed following treatment.

44. Use according to claim 37, wherein the disease is a TH1-associated disease selected from the group consisting of rheumatoid arthritis, multiple sclerosis, thyroiditis, Crohn's disease, systemic lupus erythematosus, experimental autoimmune uveoretinitis, experimental autoimmune encephalitis, insulin dependent diabetes mellitus, contact dermatitis and chronic inflammatory disorders.

45. Use according to claim 37, wherein the disease is a TH2-associated disease selected from the group consisting of allergic atopic disorders, allergic asthma, atopic dermatitis, hyper-IgE syndrome, Omenn's syndrome, and allergic rhinitis.

46. Use according to claim 37, wherein the TH2 adjuvant is selected from the group consisting of alum, pertussis toxin, lacto fucopentaose III, and phosphopolymer or combinations thereof.

47. Use according to claim 37, wherein the TH1 adjuvant is selected from the group consisting of complete Freund's adjuvant, monophosphoryl lipid A, 3-de-O-acylated monophosphoryl lipid A (3D-MPL), aluminum salt, CpG-containing oligonucleotides, immunostimulatory DNA sequences, saponin, Montanide ISA 720, SAF, ISCOMS, MF-59, SBAS-3, SBAS-4, Detox, RC-529, aminoalkyl glucosaminide 4-phosphate, and LbeIF4A.

48. Use according to any one of claims 35 to 47, wherein the individual is a mammalian animal.

49. Use according to 48, wherein the mammalian animal is a dog, a cat, a livestock animal, a primate or a horse.

50. Use according to 48, wherein the mammalian

animal is a human.

51. An immunomodifying agent comprising at least one antigen in immunogenic form and at least one adjuvant, wherein the adjuvant normally induces the type of TH-response associated with the disease caused by said antigen.